

**XTR 4043**

AWS A5.10 ER4043 R4043

**Description:**

ER4043 is a 5% Silicon aluminum filler metal that is one of the most widely used aluminum welding alloys for fabrication and general repair in the aluminum welding industry. The smooth running ER4043 is often preferred because of its reduced crack sensitivity over other aluminum welding wires. This aluminum alloy contains silicon additives, which result in improved fluidity (wetting action) of the weld pool.

**Typical Applications:**

XTR 4043 is recommended for base metals 3003, 3004, 5052, 6061, 6063 and casting alloys 43, 355, 356 and 214. 4043 is a great choice for the welding of heat-treatable base alloys and more specifically the 6XXX series alloys. It has a lower melting point and more fluidity than the 5XXX series filler alloys.

**Chemistry:**

	Typical	AWS Spec. Single values are max.
Silicon (Si)	4.950	4.5-6.0
Iron (Fe)	0.110	0.800
Copper (Cu)	0.050	0.300
Manganese (Mn)	0.000	0.050
Magnesium (Mg)	0.000	0.050
Zinc (Zn)	0.000	0.100
Titanium (Ti)	0.016	0.200
Beryllium (Be)	0.0001	0.0008

**Mechanical Properties:** (As Welded)

	Typical	AWS Spec. Single values are min.
Tensile Strength	27,000	24,000 psi
Yield Strength	18,500	ns
Elongation in 2" (%)	8	ns
Post anodize color	Gray	-

**Welding Positions:**

All

**Operating Parameters: MIG (GMAW), DCEP DC+**

<b>Spray ARC 100% Argon</b>					
Typically, the wire speed is set, then adjust to voltage to the desirable performance.					
Diameter	Amperage	Voltage	Speed (IPM)	Stickout (In.)	Flow Rate (CFH)
0.030 (.8mm)	60-175	15-24	480-625	1/2-3/4	25-30
0.035 (.9mm)	70-185	15-27	450-750		30-35
3/64 (1.2mm)	140-250	20-29	330-500		35-45
1/16 (1.6mm)	185-345	25-30	250-450		45-75

**Operating Parameters: TIG (GTAW), DCEN DC- or ACHF**

<b>Shielding gas use 100% Argon Shielding Gas</b>					
Best when using XTRweld brand tungsten, Zirconiated (EWZr-X), Lanthanated (EWLa-X), or Pure (EWP)					
Diameter	Amperage	Voltage	Tungsten Size	Flow Rate (CFH)	Gas Cup Size
1/16 (1.6mm)	60-80	15	1/16 (1.6mm)	20	3/8" (6)
3/32 (2.4mm)	85-160	15	3/32 (2.4mm)	20	3/8" (6)
1/8 (3.2mm)	190-220	15	1/8 (3.2mm)	25	7/16" (7)
5/32 (4.0mm)	200-300	15-17	5/32 (4.0mm)	30	1/2" (8)
3/16 (4.8mm)	330-380	15-20	3/16 (4.8mm)	35	5/8" (10)

[www.XTRweld.com](http://www.XTRweld.com)

Ver. 9.29.2021

XTRweld and Alliance Distribution Partners believes that all of the information and technical data given is correct. This information is given to assist in making your own evaluations and/or decisions, this should not be mistaken as an expressed or implied warranty. XTRweld assumes no liability for results or damages incurred from the use of any information contained in this document in part or in whole. Material is free from mercury and radioactive contamination

SCAN for SDS